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## CLASSIFICATION OF THE DERMESTID GENUS DEARTHURUS WITH DESCRIPTION OF A NEW WESTERN SPECIES

(Coleoptera)

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Specimens of *Dearthrus* are not at all common in collections, and almost nothing is known of their biology. However, a few of them have been brought to my attention, and a study of these has shed some light on their previously obscure relationships. Although the immature stages are still unknown, the adults seem to exhibit characters which definitely warrant placing the genus in a subfamily different than that to which it is commonly assigned.

The genus seems unquestionably to belong to the subfamily Megatominiinae rather than to the Attageniniinae. It has been considered in the Attageniniinae because of the place assigned to it in Casey's<sup>1</sup> key, where it is grouped with genera having the first metatarsal segment decidedly shorter than the second. This is not true of *Dearthrus*, the first segment being subequal to the second. Further, in the shape of the metacoxal lamina it is unlike any representative of the Attageniniinae which I have seen. In *Attagenus* and in *Novelsis* the metacoxal plate bears a distinct tooth or is distinctly broadened laterad to the insertion of the femur. In *Dearthrus*, as in *Megatoma*, *Trogoderma*, *Globicornis*, and so on, the metacoxal lamina is gradually narrowed laterally. Finally, the general facies are quite like those of the Megatominiinae, particularly of certain sections of *Globicornis*. Casey's use of the lateral extension of the metacoxal plates as a tribal character is apparently of little value. In *Dearthrus* the metacoxa reaches the inner posterior angle of the metepimeron. However, this is true of some sections of the Attageniniinae as well as of the Megatominiinae. Likewise the number of segments in the antenna is of little significance above a subgeneric level, since this character shows considerable variation throughout the family.

Whether the genus should be synonymized with *Pseudomesalia* Ganglbauer is a question which will have to await a closer study of

<sup>1</sup>T. L. Casey, 1900. Review of the American Corylophidae, Cryptophagidae, Tritomidae, and Dermestidae and other studies. Jour. N. Y. Ent. Soc., 8:144.

the latter. Kalik<sup>2</sup> has recently described a species belonging to this group, *Globicornis (Pseudomesalia) kulti*, including figures of the adult and of the antenna of a specimen which he questionably considers to be a female. The pubescence and configuration of the adult are quite similar to our species of *Dearthrus*. The antenna is nine-segmented and bears a large terminal segment which is much larger than the seventh and eighth segments. The shape of the antenna of *Dearthrus*, and suggests the possibility that these the Megatominae. If the antenna figured by Kalik is indeed that of a female, then *Pseudomesalia* and *Dearthrus* are most likely distinct. However, its configuration does closely resemble the male antenna of *Dearthrus*, and suggests the possibility that these groups are identical.

*Dearthrus longulus* LeConte of the eastern United States is the only species of the genus known at present. A second species occurring in the inland mountains of California and Oregon should also be recognized. I am happy to be able to name this species for an able student of systematic zoölogy, Dr. Robert C. Stebbins of the University of California at Berkeley.

#### *Dearthrus stebbinsi* Beal, new species

*Adult male*.—Body long and narrow with sides subparallel; elytra slightly expanded behind middle. Color of head and pronotum black; elytra dark brown; undersurfaces dark brown with legs somewhat lighter. *Pubescence* of dorsal surfaces dark brown, short, moderately fine, subrecumbent; pubescence of ventral surfaces dark golden brown, short, fine, appressed. *Punctation* of head and pronotum shallow, umbilicate, with punctures three to four times as large as facets of eye, confluent on head and sides of pronotum, contiguous on disc of pronotum; punctation of elytra craterform with punctures one to two times as large as facets of eye and separated by one to two diameters of one puncture. *Antennae* in repose extending nearly to base of prothorax; configuration as illustrated (except that ultimate segment of holotype two and one-half times as long as wide); ultimate segment of antenna densely clothed with very fine erect hairs about two thirds as long as width of third segment of antenna. *Prosternal process* long, narrow, with sides parallel to apex. Mesosternal sulcus very shallow, becoming evanescent posteriorly; mesosternum emarginate posteriorly between mesocoxae. *Length* (of pronotum and elytra): 2.7 mm. *Width* (at humeri): 1.1 mm.

*Adult female*.—Configuration of antenna as illustrated; antennal club more sparsely covered with fine hairs of irregular but generally longer length than those of male.

<sup>2</sup> Vladimir Kalik, 1949. New Dermestidae of the Palearctic fauna. Acta Ent. Mus. Nat. Pragae, 26(362):1-4.

*Range of observed variations.*—Color of elytra and undersurfaces varying from dark brown to black. Ultimate segment of male antenna varying from twice as long as wide to three times as long as wide. Length (of pronotum and elytra) varying from 3.0 mm. to 2.4 mm. Ratio of length to width varying from 1:0.41 to 1:0.47.

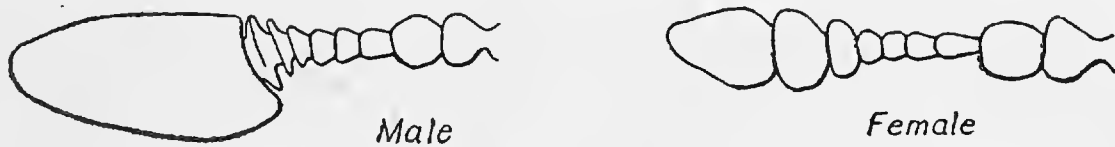


Fig. 1, Antennae of *Dearthrus stebbinsi*

*Holotype* male and *allotype* female (deposited in California Academy of Sciences): MARIPOSA COUNTY, CALIFORNIA, June 3, 1914 (F. W. Nunenmacher). Paratypes as follows: *California*: Yosemite Valley, one male, June 5, 1930, and two females, June 9, 1930 (F. E. Blaisdell); Yosemite Park, one male, 1922 (Chas. Veatch); Sierra Meadow, Giant Forest, one male, July 1, 1928 (E. A. McGregor); Tahoe, one female, July 7, 1915 (R. Hopping); Bass Lake, one female, June 3, 1942 (A. J. Walz); Plummer Springs, Trinity County, one female, June 23, 1919 (R. Hopping); Fowlers Camp, Siskiyou County, two females, July 2, 1946 (A. T. McClay); Bridge Camp, Shasta County, one male and two females, June 2, 1946 (A. T. McClay). *Oregon*: Eight miles northwest of Sisters, one female, July 8, 1939 (Schuh and Gray).

The holotype of *stebbinsi* bears two indentations on the disc of the pronotum. Similar indentations have been used as a taxonomic character in other dermestids. However, in this species the indentations occur in only a few of the specimens, and are probably not of genic origin.

*D. stebbinsi* and *D. longulus* are easily separated on the basis of several characters. The punctures on the disc of the pronotum of *longulus* are small, each puncture being one and one half to two times as large in diameter as a facet of the eye, and individual punctures are separated by one or two diameters of one puncture. In *stebbinsi* the punctures are twice as large and are contiguous. The ultimate segment of the female antenna of *longulus* is approximately three fourths times as long as wide. In *stebbinsi* the ultimate segment of the female antenna is at least one and one third times as long as wide. The ultimate segment of the male

antenna of *longulus*, according to Casey's illustration, is but one and one third times as long as wide. The ultimate segment of the male antenna of *stebbinsi* is two to three times as long as wide. The mesosternal sulcus of *longulus* extends the entire length of the mesosternum and is quite distinct, while that of *stebbinsi* is shallow and obliterated posteriorly.

Details of the biology of *stebbinsi* are unknown, except that one specimen was collected on *Ceanothus* at Bass Lake, California (A. J. Walz).

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#### BOOK NOTICE

FLEAS, FLUKES & CUCKOOS. By Miriam Rothschild and Theresa Clay. 304 pp., 99 black and white photographs (= pls. I-XL), 4 maps, 22 drawings. Collins, St. James Place, London; The Philosophical Library, Inc., 15 East 40th St., New York 16, N. Y. 1952.

The cover title may puzzle some people, but the content will delight every naturalist and most other readers. The exquisite choice of words makes plain sentences stick in one's memory. Statements of fact which might be elsewhere dry, remain accurate yet often become excruciatingly funny. Speculation is clearly noted as such.

The book tells of the parasites of birds, which include fleas, feather lice, protozoa, worms, flies, mites and ticks, and "micro-parasites" (bacteria, viruses, fungi). Discussions of these in the above order, fill chapters 7-13, and comprise most of parts II and III. Part I is introductory, and treats of parasitism, commensalism, symbiosis, the effect of parasites on the host and of parasitism on the parasites, the origins of parasitism, and the evolution of parasites. The final chapters of part III deal with the fauna of birds' nests, the clepto-parasitic skaus, and the parasitic European cuckoo. Throughout there are pointers to unanswered or unexplored problems, both in entomology and in ornithology. There is a general index and one of scientific and popular names. The photographs and line drawings are almost all excellent and have been discriminatingly chosen. The book deserves its rank of a Special Volume in the New Naturalist series.—HUGH B. LEECH.